USCMS Engineer Status Report for June 2004

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1 Work Performed This Month

1) Generating Graviton and QCD background datasets (Caltech has this responsibi lity). 70k of graviton dataset already been generated and prepared for the future simu lation reconstruction and analysis through the official US CMS MOP system, as well as 11.0M of QCD background events. The start of this simulation will be in July. 2) Report on Diphoton RS graviton decay with status and plans was presented during June CMS week. Two main points: - 1 year equivalent of QCD background was generated and is ready to simulate. - bugfix in PYTHIA didn't hurt our set of cuts for the PYTHIA level preselectio n. 3) CMS Internal Note about Eta standalone calibration has been released. The number is CMS IN 021/04 . The decay Physics eta to gamma gamma is investigated to calibrate the barrel of the CMS electromagnetic calorimeter. The idea is to reconstruct the invariant m ass of eta particles from two photons and use the mass peak mean value for calib ration. The results are done with full detector simulation. The aim of this note is to estimate the time needed for crystal-by-crystal calibration at 0.5
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4) Final version of presentation on Grid04 (Pittsburg) was done with Edward and Dan. 5) Statistical analysis of PBS jobs on all clusters for the 2Q04 is in progress.

6) Adaptation of our analysis code to ORCA8 and tests are in progress: - the ability to store DST will be introduced in a code. - Trigger L1 part will be added - (optional) other changes from Marco Pieri will be introduced (if any).

2 Status of Deliverables

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3 Plans For Next Month

1) Continue Calorimetry redesing. Will talk with peoples from CASTOR team - we need to introduce CASTOR in ORCA. 2) Make a presentation in Dubna (JINR, Russia) about our experience with long - term massive production runs during Caltech production. 4) Caltech production will go into reconstruction in July- August 5) statistical analysis of our PBS tasks on different clusters. Summary for the first half of the year. 6) preparations for the Grid04 presentation in Pittsburg in July - October.